# Impact Of Low Frequency Trading On Equity Market With Reference To Bse In India

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#### Abstract

Economic activities require funds being arranged through various sources such as own funds, borrowings, issue of securities, etc. Among securities, equity shares are issued in the capital markets. Bombay Stock Exchange is one of the capital markets where equity shares are traded. Investors frequently trade in such equityshares of their choice. Hence, numerous trading frequencies take place in a trading day. Such trading frequencies influence on share price changeduring a trading day. Hence, the statement is "Impact of Low Frequency Trading on Equity Market with Reference to BSE in India". Thus, the lower the trading frequency, the lower are share price changes. The main objective of this study is to examine the impact of low frequency trading on share price change duringJanuary, 2020 to May, 2020. The required secondary data was collected from <a href="https://www.bseindia.com">www.bseindia.com</a>. Analysis and interpretation are done to test a hypothesis that low frequency trading hasnegative impact on share price change. The results revealed that low frequency trading hadnegative impact as well as positive impact on share price change on BSE 30 companies. The study suggests that more variables may be covered for a future study.

**Key words**: Bombay Stock Exchange, BSE 30 Companies, Capital Market, Equity Market, Low Frequency Trading, Share Price Change.

#### 1. Introduction

Bombay Stock Exchange (BSE) is acapital market where the listed securities are traded. BSE was established in 1875 and it is Asia's oldest stock exchange. BSE is the world's 10th largest stock exchange with an overall capitalization of more than Rs 1,27,06,528.94 Crore as on 31-05-2020 downloaded from <a href="https://www.bseindia.com">www.bseindia.com</a>. Numerous trading frequencies take place in a trading day. One buys shares when market opens and sells them on the same trading day to gain profits or holdsshares to next day or week or month. There are three factors involved in securities trading namely trading frequencies, share price change and number of shares traded. Here, trading frequencies are considered as independent variable whereas share price change is dependent variable. It is contemplated that the lowfrequency trading has negative impact on share price change in trading month. Further, lower trading cost, minimum taxes, avoidance of falling prey to forecasting, etc. are the benefits of low frequency trading in equity market.

# 2. Bombay Stock Exchange (BSE) 30 SENSEX: Theoretical Background

A Stock Exchange is a marketplace where shares change hands for a consideration. A stock market provides an opportunity to raise funds by a company whose shares are listed with a particular stock exchange per se BSE.BSE 30 Sensex consists of shares of 30 well-established and financially sound companies listed on BSE. These BSE 30 companies are called as blue-chip companies. BSE 30 companies belong to various sectors of the Indian Economy and shares of these BSE 30 companies are the largest and actively traded shares. It is interesting to note that the full market capitalization was about Rs 1,27,06,528.94 Crore as on 31-05-2020.

Market Index is calculated on the basis of free-float capitalization method, a variation of market capitalization method. According to free-float capitalization method, BSE Sensexrepresents free float market value of stocks of BSE 30 companies relative to base period. Market capitalization refers to the aggregate valuation of the company based on its current market price per stock and the total number of outstanding stocks.

The free-float capitalization is very different from the market capitalization and is normally inferior to the later one. Further, the free-float capitalization excludes (i) Locked in shares, (ii) Shares owned by the promoters, (iii) The shares acquired through Foreign Direct Investment route and (iv) The shares held by the governments.

The term "Equity Market" refers to a market where shares are traded, either through a stock exchange or over-the-counter market. Equity market provides a platform to companies to access to capital and investors, a slice of ownership in a company with potential to realize gains based on its future performance.

# 3. Impact of Low Frequency Trading on Share Price Change

Shares are traded on BSE and hence trading frequencies i.e. buying and selling transactions take place in a trading day. During the course of buying and selling transactions, the securities change hands for a consideration. Further, trading frequencies are generally more during bullish hourswhereas trading frequencies are lower during bearish hours. The bearish hours lead to low frequency trading. The demand and supply decide share price change. The higher the demand, the more isshare price change. On the other hand, the lower the

demand, the lower isshare price change. Hence, it is assumed that the low frequency trading has negative impact on share price change in a month.

It is clear that share prices of a few BSE 30 companies are higher than the share prices of the majority of other BSE 30 companies. The low-income investors cannot afford to invest in such higher price shares. Rather, they prefer to invest in more shares of lower share price. Low frequency trading is affected by the higher share prices. Sometimes, investors or brokers being risk-averse may hold shares for long duration to realize capital gains. So, when shares are held for long term, they may have low frequency trading. Low frequency trading is a barrier to equity market development and also to foreign investors. On the other hand, shares having low frequency trading are associated with low returns and argued that low frequency trading are due to signals of bad news in the market and thereby share prices were slowed down. Thus, it is concluded that low frequency trading generates low returns than high frequency trading. Among the blue-chip shares like BSE 30 companies shares, some of them have high frequency trading and few have low frequency trading in a month.

# 4. Objective of the Study

The following objectiveshave been for the present study.

- i. To examine the impact of low frequency trading on equity market with reference to BSE in India from January, 2020 to May, 2020,
- ii. To study the low frequency trading and share price change.

### 5. Methodology

This is an analytical study based on the secondary data collected from <a href="www.bseindia.com">www.bseindia.com</a>, the official website of Bombay Stock Exchange for a period from January, 2020 to May, 2020. Three low frequency trading of BSE 30 companies in each month are considered for analysis and interpretation purpose. These three low frequency trading are examined to assess the impact on share price changein a month. Therefore, the following hypothesis is set for the present study.

**Hypothesis** = Low frequency trading has an egative impact on share price change during the study period.

In this study, number of trades done on BSE 30 equity market are considered as frequencytrading in a month. The low frequency trading is independent variable whereas share price change is a dependent variable. The hypothesis is tested to accept or rejectwhether low frequency trading has a negative impact on share price change during the study period.

# 6. Significance of the Study

The present study throws an insight into the impact of low frequency trading on equity market with reference to BSE 30 companies. The low frequency trading influences on share price changeduring a month. The study helps the potential investors as under.

- i. The analysis of information may be used by the investors,
- ii. The investors may investin shares having low frequency tradingbut positive share price change.
- iii. The investors are required to avoid investing in shares having low frequency trading and negative share price change.

## 7. Limitation of the Study

The present study is limited to the impact of low frequency trading on equity market with reference to BSE 30 companies. Hence, the information analysed and interpreted covers only two variables namely low frequency trading and share price change from January, 2020 to May, 2020 and it may not reveal the impact of low frequency trading on other variables associated with trading activities.

#### 8. Review of Literature

Some studies have been carried on frequency trading with regard to shares. Trading frequency may be defined as the number of days in which a share shows price change to the total number of trading days within the market. Some of the following studies have been reviewed for the purpose of this study as under.

Minovic (2012) found that existence of infrequently trading shares is a barrier for stock market development and also to foreign investors. Further, he highlighted that investors chose not to trade when cost of trading is higher than the benefit that would result in zero or negative returns.

Oprea D (2015) observed that shares which are infrequently traded may be associated with long term holding stock by investors or brokers who are risk-averse, and this directly results in illiquidity of shares and visversa.

Reuters (2015) reported that the threshold trading frequency for developed markets is 90%, emerging markets 80% and frontier markets 50%.

Karaa et al. (2018) summed up that infrequently traded shares are associated with low returns. They revealed that infrequently trading or non-trading were the signals of bad news, which slows down the price of

stock. The investors buy and sell more frequently when there was good news. Further, their study underlined that volatility also increases when trade intensity increases but this finding is only restricted to high frequently traded shares referred as blue-chip stocks.

Busse et al. (2019) observed that the frequently tradinggenerates abnormal returns than those who are traded less frequently His study overlooked to address the situation when many investors are traded on the same companies. Further, the study found that shares which were frequently traded generated higher returns compared to shares which were infrequently traded.

In this study, only three low frequency trading of three companies out of BSE 30 companies are examined to study the impact of low frequency trading on equity market with reference to BSE in India. Therefore, share price change is matched with low frequency trading to examine its impact.

# 9. Analysis and Interpretation of data from January, 2020 to May, 2020

In this study, the secondary datacollected from <a href="www.bseindia.com">www.bseindia.com</a> is compiled, presented in table forms and analysed and interpreted. The values of independent variable i.e. low frequency trading and one dependent variable i.e. share price change are examined. Only three low frequency trading in a month are analysed and interpreted to examine the impact of low frequency trading on equity market with reference to BSE 30 companies for the period of five months from January, 2020 to May, 2020.

Share Price change = Closing price minus (-) Opening price.

Therefore, Opening price means price of a share at the beginning a particular month and Closing price means price of a share at the end of the same month.

Price change (%) = (Price change/Opening price) \* 100.

**9.1** Information relating to frequency trading and share price change of BSE 30 companies for 23 trading days in January, 2020 is presented in Table No: 1.

Table No: 1
FrequencyTrading and Share Price Changefor 23 Trading Days in January, 2020

Sl No	BSE 30 Companies	Opening price	Closing price	Price change	Price change (%)	Frequency trading
1	2	3	4	5 (4 – 3)	6	7
1	Nestle India	14,819.95	15,360.85	540.90	3.65	18,496
2	Bajaj Auto	3,185.00	3,178.95	-6.05	-0.19	33,975
3	Hero MotoCorp	2,460.00	2,501.90	41.90	1.70	41,545
4	Tech Mahindra	764.50	795.40	30.90	4.04	45,724
5	M & M	534.40	567.35	32.95	6.17	53,928
6	Utra Chem Co	4,065.70	4,418.00	352.30	8.67	57,972
7	HUL	1,931.00	2,034.15	103.15	5.34	62,333
8	Asian Paints	1,790.15	1,795.25	5.10	0.28	63,498
9	HCL Tech	572.00	591.50	19.50	3.41	73,849
10	Power Grid	191.70	186.90	-4.80	-2.50	76,017
11	Titan	1,196.40	1,188.10	-8.30	-0.69	76,041
12	NTPC	119.05	112.80	-6.25	-5.25	78,761
13	HDFC	2,417.00	2,412.40	-4.60	-0.19	84,712
14	Sun Pharma	433.00	434.00	1.00	0.23	86,043
15	Maruti Suzuki	7,380.05	6,911.70	-468.35	-6.35	88,777
16	Kotak Bank	1,686.90	1,691.05	4.15	0.25	1,04,395
17	ITC	238.90	235.25	-3.65	-1.53	1,12,616
18	Axis Bank	755.00	729.35	-25.65	-3.40	1,14,097
19	ONGC	128.65	108.90	-19.75	-15.35	1,18,110
20	Bajaj Finance	4,235.00	4,365.25	130.25	3.08	1,18,387
21	TCS	2,170.00	2,079.30	-90.70	-4.18	1,40,228
22	L & T	1,310.00	1,369.10	59.10	4.51	1,48,552
23	Infosys	733.60	776.35	42.75	5.83	1,52,783
24	HDFC Bank	1,275.00	1,225.70	-49.30	-3.87	1,80,883
25	Indus Bank	1,510.60	1,258.90	-251.70	-16.66	1,84,672
26	Tata Steel	473.10	438.75	-34.35	-7.26	1,97,216
27	Bharti Airtel	458.00	496.70	38.70	8.45	2,00,433
28	ICICI Bank	539.20	525.55	-13.65	-2.53	2,03,454
29	Reliance	1,516.10	1,411.70	-104.40	-6.89	3,07,447

30	SBI	334.50	318.55	-15.95	-4.77	3,11,422
Total		59,224.45	59,519.65	295.20	-26.00	35,36,366
Avera	age	1,974.15	1,983.99	9.84	-0.87	1,17,879

Source: www.bseindia.com

Table No: 1 shows the frequency trading of BSE 30 companies'shares during 23 trading days in January, 2020. Hence, the first three low frequency trading of three companies are selected for analysis and interpretation purpose. Among these three companies selected, Nestle India has the lowest frequency trading i.e. 18,496 trades. Notwithstanding that its share price moved up by Rs 540.90 (3.65%). This is followed by the second lowest frequency trading i.e. 33,975 trades in respect of Bajaj Auto and its share price moved downwards by Rs - 6.05 (- 0.19%). The third lowest frequency trading i.e. 41,545 trades is reported in respect of Hero MotoCorp, the share price of which gained by Rs 41.90 (1.70%) during 23 trading days in January, 2020.

**9.2** Information relating to frequency trading and share price change of BSE 30 companies for 20 trading days in February, 2020 is presented in Table No: 2.

Table No: 2
Frequency Trading and Share Price Change for 20 Trading Days in February, 2020

Sl No	BSE 30 Companies	Opening price	Closing price	Price change	Price change (%)	Frequency trading
1	2	3	4	5 (4 – 3)	6	7
1	Nestle India	15,360.85	15,770.55	409.70	2.67	26,872
2	Bajaj Auto	3,178.95	2,890.45	-288.50	-9.08	36,149
3	Utra Chem Co	4,418.00	4,219.70	-198.30	-4.49	38,131
4	Tech Mahindra	795.40	743.90	-51.50	-6.47	44,170
5	Kotak Bank	1,691.05	1,619.65	-71.40	-4.22	52,742
6	Asian Paints	1,795.25	1,798.20	2.95	0.16	54,312
7	M & M	567.35	456.40	-110.95	-19.56	58,011
8	Power Grid	186.90	181.50	-5.40	-2.89	61,479
9	Hero MotoCorp	2,501.90	2,048.10	-453.80	-18.14	65,846
10	HCL Tech	591.50	534.10	-57.40	-9.70	66,057
11	NTPC	112.80	106.55	-6.25	-5.54	68,320
12	Titan	1,188.10	1,254.75	66.65	5.61	74,106
13	Axis Bank	729.35	696.75	-32.60	-4.47	78,598
14	Sun Pharma	434.00	372.95	-61.05	-14.07	83,264
15	HUL	2,034.15	2,174.90	140.75	6.92	85,934
16	Bajaj Finance	4,365.25	4,463.10	97.85	2.24	92,270
17	ONGC	108.90	91.95	-16.95	-15.56	1,03,700
18	Maruti Suzuki	6,911.70	6,284.00	-627.70	-9.08	1,06,618
19	Infosys	776.35	731.35	-45.00	-5.80	1,11,085
20	Bharti Airtel	496.70	524.05	27.35	5.51	1,30,594
21	TCS	2,079.30	2,000.95	-78.35	-3.77	1,32,209
22	HDFC	2,412.40	2,176.70	-235.70	-9.77	1,34,948
23	ICICI Bank	525.55	496.05	-29.50	-5.61	1,57,761
24	HDFC Bank	1,225.70	1,177.60	-48.10	-3.92	1,60,087
25	Indus Bank	1,258.90	1,104.00	-154.90	-12.30	1,60,738
26	L & T	1,369.10	1,183.00	-186.10	-13.59	1,79,172
27	ITC	235.25	197.60	-37.65	-16.00	1,81,790
28	Tata Steel	438.75	381.55	-57.20	-13.04	2,06,028
29	Reliance	1,411.70	1,328.65	-83.05	-5.88	3,03,563
30	SBI	318.55	302.90	-15.65	-4.91	3,31,210
Tota	al	59,519.65	57,311.90	-2,207.75	-194.77	33,85,764
	rage	1,983.99	1,910.40	-73.59	-6.49	1,12,859

Source: www.bseindia.com

Table: 2 presents the frequency trading of BSE 30 companies' shares during 20 trading days in February, 2020. Hence, the first three low frequency trading of three companies are selected for analysis and interpretation purpose. Among these three companies selected, the lowest frequency trading i.e. 26,872 trades of Nestle India are reported and its share price moved up by Rs 409.70 (2.67%) followed by Bajaj Auto with the second lowest frequency trading i.e. 36,149 trades but its share price declined by Rs - 288.50 (- 9.08%). Further,

the third lowest frequency trading i.e. 38,131 trades is reported in respect of Ultra Chem Co and its share price plunged by Rs -198.30 (-4.49%) during 20 trading days in February, 2020.

**9.3** Information relating to frequency trading and share price change of BSE 30 companies for 21 trading days in March, 2020 is presented in Table: 3.

Table: 3
Frequency Trading and Share Price Change for 21 Trading Days in March, 2020

Sl No	BSE 30 Companies	Opening price	Closing price	Price change	Price change (%)	Frequency trading
1	2	3	4	5 (4- 3)	6	7
1	Nestle India	15,770.55	16,302.40	531.85	3.37	46,520
2	Bajaj Auto	2,890.45	2,024.90	-865.55	-29.95	69,844
3	Utra Chem Co	4,219.70	3,254.25	-965.45	-22.88	80,054
4	Hero MotoCorp	2,048.10	1,594.20	-453.90	-22.16	87,608
5	Tech Mahindra	743.90	564.95	-178.95	-24.06	94,249
6	Power Grid	181.50	159.00	-22.50	-12.40	1,03,380
7	NTPC	106.55	84.20	-22.35	-20.98	1,04,455
8	M & M	456.40	285.00	-171.40	-37.55	1,15,322
9	Titan	1,254.75	933.50	-321.25	-25.60	1,29,708
10	HCL Tech	534.10	436.75	-97.35	-18.23	1,31,652
11	Asian Paints	1,798.20	1,666.70	-131.50	-7.31	1,37,079
12	Sun Pharma	372.95	352.20	-20.75	-5.56	1,64,882
13	HUL	2,174.90	2,298.15	123.25	5.67	1,76,442
14	Maruti Suzuki	6,284.00	4,287.75	-1,996.25	-31.77	2,11,217
15	Bharti Airtel	524.05	440.60	-83.45	-15.92	2,25,493
16	ONGC	91.95	68.30	-23.65	-25.72	2,72,278
17	Kotak Bank	1,619.65	1,296.35	-323.30	-19.96	2,81,975
18	TCS	2,000.95	1,823.05	-177.90	-8.89	2,90,319
19	HDFC	2,176.70	1,630.45	-546.25	-25.10	3,12,427
20	Tata Steel	381.55	269.75	-111.80	-29.30	3,39,697
21	ITC	197.60	172.00	-25.60	-12.96	3,56,486
22	Infosys	731.35	640.30	-91.05	-12.45	4,12,072
23	L & T	1,183.00	806.85	-376.15	-31.80	4,20,001
24	Axis Bank	696.75	379.30	-317.45	-45.56	4,45,177
25	Bajaj Finance	4,463.10	2,216.05	-2,247.05	-50.35	4,88,293
26	ICICI Bank	496.05	324.50	-171.55	-34.58	5,39,715
27	Indus Bank	1,104.00	351.15	-752.85	-68.19	6,88,955
28	HDFC Bank	1,177.60	862.00	-315.60	-26.80	7,96,430
29	SBI	302.90	196.95	-105.95	-34.98	8,12,315
30	Reliance	1,328.65	1,112.45	-216.20	-16.27	8,43,846
Tota		57,311.90	46,834.00	-10,477.90	-708.23	91,77,891
	rage	1910.40	1561.13	-349.26	-23.61	305930

Source: www.bseindia.com

Table: 3 depicts the frequency trading of BSE 30 companies' shares during 21 trading days in March, 2020. Hence, the first three low frequency trading of three companies are selected for analysis and interpretation purpose. Among these three companies selected, Nestle India has the lowest frequency trading i.e. 46,520 trades and its share price jumped up by Rs 531.85 (3.37%). This is followed by the second lowest frequency trading i.e. 69,844 trades of Bajaj Auto but its share price fell by Rs –865.55 (- 29.95%). The third lowest frequency trading i.e. 80,054 trades is reported in respect of Ultra Chem Co and reported a fall in its share price by Rs –965.45 (- 22.88%) during 21 trading days in March, 2020.

**9.4** Information relating to frequency trading and share price change of BSE 30 companies for 18 trading days in April, 2020 is presented in Table No: 4.

Table No: 4
Frequency Trading and Share Price Change for 18 Trading Days in April, 2020

Sl No	BSE 30 Companies	Opening price	Closing price	Price change	Price change (%)	Frequency trading
1	2	3	4	5 (4-3)	6	7

1	Nestle India	16,302.40	17,906.10	1,603.70	9.84	30,854
2	Utra Chem Co	3,254.25	3,532.50	278.25	8.55	44,538
3	Power Grid	159.00	162.05	3.05	1.92	52,553
4	Bajaj Auto	2,024.90	2,627.75	602.85	29.77	56,302
5	NTPC	84.20	95.35	11.15	13.24	57,084
6	HCL Tech	436.75	542.80	106.05	24.28	76,395
7	Asian Paints	1,666.70	1,760.05	93.35	5.60	96,093
8	Tech Mahindra	564.95	546.10	-18.85	-3.34	1,00,579
9	Hero MotoCorp	1,594.20	2,166.80	572.60	35.92	1,03,167
10	Titan	933.50	969.80	36.30	3.89	1,20,779
11	M & M	285.00	366.60	81.60	28.63	1,22,497
12	Bharti Airtel	440.60	514.35	73.75	16.74	1,44,220
13	ONGC	68.30	79.95	11.65	17.06	1,47,741
14	ITC	172.00	182.15	10.15	5.90	1,90,820
15	Infosys	640.30	716.20	75.90	11.85	1,96,311
16	HUL	2,298.15	2,195.70	-102.45	-4.46	2,05,004
17	TCS	1,823.05	2,014.85	191.80	10.52	2,12,160
18	Tata Steel	269.75	298.45	28.70	10.64	2,15,992
19	Maruti Suzuki	4,287.75	5,360.30	1,072.55	25.01	2,24,782
20	Sun Pharma	352.20	464.85	112.65	31.98	2,28,659
21	L & T	806.85	897.35	90.50	11.22	2,51,937
22	Kotak Bank	1,296.35	1,356.95	60.60	4.67	2,62,463
23	HDFC	1,630.45	1,917.10	286.65	17.58	2,67,016
24	SBI	196.95	190.40	-6.55	-3.33	4,22,006
25	Axis Bank	379.30	444.60	65.30	17.22	4,49,272
26	HDFC Bank	862.00	1,001.75	139.75	16.21	4,57,915
27	ICICI Bank	324.50	379.90	55.40	17.07	4,88,885
28	Bajaj Finance	2,216.05	2,317.05	101.00	4.56	5,76,492
29	Reliance	1,112.45	1,467.05	354.60	31.88	7,23,011
30	Indus Bank	351.15	468.00	116.85	33.28	7,26,355
Tota	al	46,834.00	52,942.85	6,108.85	433.91	72,51,882
Ave	rage	1,561.13	1,764.76	203.63	14.46	2,41,729

Source: www.bseindia.com

Table: 4 demonstrates the frequency trading of BSE 30 companies' shares during 18 trading days in April, 2020. Hence, the first three low frequency trading of three companies are selected for analysis and interpretation purpose. Among these three companies selected, Nestle India has the lowest frequency trading i.e. 30,854 trades and its share price jumped up by Rs 1603.70 (9.84%) and followed by Utra Chem Co with the second lowest frequency trading i.e. 44,538 trades and its share price jumped up by Rs 278.25 (8.55%). Further, the third lowest frequency trading i.e. 52,553 trades is reported in respect of Power Grid and an increase in its share price by Rs 3.05 (1.92%)during 18 trading days in April, 2020.

**9.5** Information relating to frequency trading and share price change of BSE 30 companies for 19 trading days in May, 2020 is presented in Table No: 5.

Table No: 5
Frequency Trading and Share Price Change for 19 Trading Days in May, 2020

Sl No	BSE 30 Companies	Opening price	Closing price	Price change	Price change (%)	Frequency trading
1	2	4	5	6 (5 - 4)	7	8
1	Nestle India	17,906.10	17,533.85	-372.25	-2.08	39,928
2	Bajaj Auto	2,627.75	2,712.05	84.30	3.21	53,765
3	NTPC	95.35	97.75	2.40	2.52	58,474
4	Utra Chem Co	3,532.50	3,901.80	369.30	10.45	59,404
5	Tech Mahindra	546.10	530.40	-15.70	-2.87	76,006
6	HCL Tech	542.80	550.40	7.60	1.40	84,744
7	Power Grid	162.05	157.55	-4.50	-2.78	87,944
8	ONGC	79.95	83.20	3.25	4.07	90,616
9	Titan	969.80	890.60	-79.20	-8.17	1,03,151

Ave	rage	1,764.76	1,742.49	-22.27	-1.93	2,75,073
Tota	al	52,942.85	52,274.75	-668.10	-57.86	82,52,193
30	Hero MotoCorp	2,166.80	2,390.65	223.85	10.33	11,69,849
29	Reliance	1,467.05	1,465.20	-1.85	-0.13	6,44,406
28	Bajaj Finance	2,317.05	1,952.70	-364.35	-15.72	5,93,273
27	SBI	190.40	160.30	-30.10	-15.81	5,29,146
26	ICICI Bank	379.90	332.10	-47.80	-12.58	5,07,678
25	HDFC Bank	1,001.75	951.25	-50.50	-5.04	4,87,208
24	Indus Bank	468.00	393.30	-74.70	-15.96	4,84,397
23	Axis Bank	444.60	383.20	-61.40	-13.81	4,74,190
22	HUL	2,195.70	2,056.90	-138.80	-6.32	3,27,556
21	HDFC	1,917.10	1,659.35	-257.75	-13.44	3,16,693
20	Bharti Airtel	514.35	552.40	38.05	7.40	3,07,817
19	L & T	897.35	932.30	34.95	3.89	2,51,599
18	ITC	182.15	197.45	15.30	8.40	2,19,147
17	Maruti Suzuki	5,360.30	5,612.00	251.70	4.70	2,17,782
16	Kotak Bank	1,356.95	1,223.70	-133.25	-9.82	2,14,986
15	Tata Steel	298.45	295.20	-3.25	-1.09	1,78,313
14	Infosys	716.20	691.35	-24.85	-3.47	1,56,294
13	Asian Paints	1,760.05	1,684.40	-75.65	-4.30	1,37,612
12	TCS	2,014.85	1,971.55	-43.30	-2.15	1,35,008
11	Sun Pharma	464.85	475.45	10.60	2.28	1,30,246
10	M & M	366.60	436.40	69.80	19.04	1,14,961

Source: www.bseindia.com

Table 5 shows the frequency trading of BSE 30 companies during 19 trading days in May, 2020. Hence, the first three low frequency trading of three companies are considered for analysis and interpretation purpose. Among these three companies selected, Nestle India has the lowest frequency trading i.e. 39,928 trades. Consequently, the share price of Nestle India eroded by Rs - 372.25 (-2.08%). This is followed by the second lowest frequency trading i.e. 53,765 trades in respect of Bajaj Auto, the share price of which jumped up by Rs + 30 (3.21%). The third lowest frequency trading i.e. 58,474 trades is reported in respect of NTPC, the share price of which gained by Rs + 2.40 (2.52%)during 19 trading days in May, 2020.

**9.6** Information relating to three low frequency trading of BSE 30 companies from January, 2020 to May, 2020 is presented in Table No: 6.

Table No: 6
Three Low Frequency Trading from January, 2020 to May, 2020

Sl No	BSE 30 Companies	Open	Close	Price change	Price change (%)	Frequency trading
1	2	3	4	5 (4 – 3)	6	7
Tree	e Low Frequency	Trading in J	anuary, 202	0		
1	Nestle India	14,819.95	15,360.85	540.90	3.65	18,496
2	Bajaj Auto	3,185.00	3,178.95	-6.05	-0.19	33,975
3	Hero MotoCorp	2,460.00	2,501.90	41.90	1.70	41,545
Tree	e Low Frequency	Trading in F	February, 20	20		
1	Nestle India	15,360.85	15,770.55	409.70	2.67	26,872
2	Bajaj Auto	3,178.95	2,890.45	-288.50	-9.08	36,149
3	Utra Chem Co	4,418.00	4,219.70	-198.30	-4.49	38,131
Tree	e Low Frequency	Trading in N	March, 2020			
1	Nestle India	15,770.55	16,302.40	531.85	3.37	46,520
2	Bajaj Auto	2,890.45	2,024.90	-865.55	-29.95	69,844
3	Utra Chem Co	4,219.70	3,254.25	-965.45	-22.88	80,054
Tree	e Low Frequency	Trading in A	April, 2020			
1	Nestle India	16,302.40	17,906.10	1,603.70	9.84	30,854
2	Utra Chem Co	3,254.25	3,532.50	278.25	8.55	44,538
3	Power Grid	159.00	162.05	3.05	1.92	52,553
Tree	e Low Frequency	Trading in N	May, 2020			
1	Nestle India	17,906.10	17,533.85	-372.25	-2.08	39,928

2	Bajaj Auto	2,627.75	2,712.05	84.30	3.21	53,765
3	NTPC	95.35	97.75	2.40	2.52	58,474

Source: Table No: 1 to 5 above

Table 6 presents the three low frequency trading in each month under study. Among three companies having low frequency trading, Nestle India has the lowest frequency trading in all the five months tradingperiod and its share prices witnessed the positive returns (i.e. Rs 540.90, Rs 415.55, Rs 402.40 and Rs 1,526.10 respectively) in the first four months. However, its share prices witnessed the negative returns (i.e. Rs -165.15) in May, 2020. Further, the share prices of Nestle India if compared with the share prices of the rest of BSE 30 companies are the highest. Therefore, the small investors do not afford to invest in the shares being traded at the higher prices like Nestle India. Hence, it is concluded that the low frequency trading has positive as well as negative impact on share price changeduring the study period.

### 10. Hypothesis Accepted or Rejected

**Hypothesis** = Low frequency trading has negative impact on share price change during the study period. The analysis revealed that the low frequency trading has positive as well as negative impact on share price changeduring the study period as shown under.

Table No: 7
Matrix of Hypothesis Accepted or Rejected

S I No	Month	BSE 30 Companies name	Frequency trading	Share price change in Rs	Hypothesis Accepted or Rejected
		Nestle India	18,496	540.90 (3.65%)	Rejected
1	January	Bajaj Auto	33,975	-6.05 (- 0.19%)	Accepted
		Hero MotoCorp	41,545	41.90 (1.70%)	Rejected
		Nestle India	26,872	409.70 (2.67%)	Rejected
2	February	Bajaj Auto	36,149	-288.50 (- 9.08%)	Accepted
		Utra Chem Co	38,131	-198.30 (- 4.49%)	Accepted
		Nestle India	46,520	531.85 (3.37%)	Rejected
3	March	Bajaj Auto	69,844	-865.55 (- 29.95%)	Accepted
		Utra Chem Co	80,054	-965.45 (- 22.88%)	Accepted
		Nestle India	30,854	1,603.70 (9.84%)	Rejected
4	April	Utra Chem Co	44,538	278.25 (8.55%)	Rejected
		Power Grid	52,553	3.05 (1.92%)	Rejected
		Nestle India	39,928	-372.25 (- 2.08%)	Accepted
5	May	Bajaj Auto	53,765	84.30 (3.21%)	Rejected
		NTPC	58,474	2.40 (2.52)	Rejected

Source: Table No: 6

Table No: 7 shows whether the hypothesis is accepted or rejected during the study period. The hypothesis is rejected in case of Nestle India in the first four months i.e. January, February, March and April, 2020 whereas it isaccepted in May, 2020 and in case of Bajaj Auto, the hypothesis is accepted in the first three months i.e. January, February and March, 2020 but rejected in May, 2020. Further, the hypothesis is rejected in case of Hero MotoCorp in January, 2020 and in case of Utra Chem Co, the hypothesis is accepted in February and March, 2020 but rejected in April, 2020. The hypothesis is rejected in case of Power Grid in April, 2020 whereas in case of NTPC rejected in May, 2020. Hence, it is submitted that low frequency trading has positive as well as negative positive impact on share price change on BSE 30 companies during the study period.

### 11. Findings

The analysis and interpretation of data pertaining to low frequency trading on equity market with reference to BSE in India has revealed that low frequency trading has positive impact as well as negative impact on share price changeamong BSE 30 companies during the study period. The major findings of the present study include the following ones.

- i. The low frequency trading has positive impact on share price change in case of Nestle India in January, February, March and April, 2020 and negative impact in May, 2020.
- ii. The low frequency trading has negative impact on share price change in case of Bajaj Autoin January, February and March, 2020 but positive impact in May, 2020.
- iii. The low frequency trading has positive impact on share price change in case of Hero MotoCorp in January, 2020 and in case of Utra Chem Co, negative impact in February and March, 2020 but positive impact in April, 2020.

iv. The low frequency trading has positive impact on share price change in case of Power Grid and in case of NTPC in April, 2020 and in May, 2020 respectively.

## 12. Suggestions

It is observed that the low frequency trading has also positive impact as well as negative impact on share price change during the study period. Hence, the following suggestions are offered.

- The investors may trade more in those equity shares which generate more market return in trading month.
- ii. The investors are advised to not trade in those shares, the market return of which is negative in trading month.
- iii. The more shares may be traded to generate higher market returns.

# 13. Scope for the Future Study

The future study may be undertaken to examine the impact of low frequency trading on equity market with reference to BSE 30 companies: The study may cover the following subject matter.

- i. Analysis of sectorwise market return in trading month,
- ii. Analysis of sectorwise positive or negative return,
- iii. Analysis of more variables associated with market return.

#### 14. Conclusion

To conclude the discussion, the study reveals that BSE is the world's 10th largest stock exchange with an overall capitalization of more than Rs 1,27,06,528.94 Crore as on 31-05-2020. Market Index is calculated on the basis of free-float capitalization method, a variation of market capitalization method. The listed stocks are traded daily on BSE including the stocks of 30 blue-chips companies. The trading of shares of BSE 30 companies influence on the market index. The results revealed that the low frequency trading has positive impact as well as negative impact on share price change during the study period. When the low frequency trading has negative impact on share price change, the hypothesis is accepted and rejected when the low frequency trading has positive impact on share price change. Hence, the hypothesis is rejected in case of Nestle India in the first four months i.e. January, February, March and April, 2020 whereas it is accepted in May, 2020 and in case of Bajaj Auto, the hypothesis is accepted in the first three months i.e. January, February and March, 2020 but rejected in May, 2020. Further, the hypothesis is rejected in case of Hero MotoCorp in January, 2020 and in case of Utra Chem Co, the hypothesis is accepted in February and March, 2020 but rejected in April, 2020. The hypothesis is rejected in case of Power Grid in April, 2020 whereas in case of NTPC rejected in May, 2020. Hence, it is submitted that low frequency trading has positive impact as well as negative impact on share price change on BSE 30 companies during the study period.

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### Website

1. www.bseindia.com